

ABSTRACT OF THE DISCLOSURE

The high-strength race of the present invention comprises using A steel for a high-strength race comprising the following elements in percentage by weight: C: 0.30 to 0.60%, Si: 0.30 to 1.30%, Mn: 0.5 to 1.5%, B: 0.0050% or less, Cr: 0.1 to 0.5%, Mo: 0.1 to 0.5%, Si + Mo: 0.5 to 1.4%, Ni: 0.02 to 1.0%, the balance of Fe and unavoidable impurities, performing induction hardening to make the race have a surface hardness of 58 HRC or more and further a surface hardness of 52 HRC or more even after the surface is tempered at 300 °C. The high-strength race is superior in rotating fatigue properties, anti-surface fatigue strength and productivity by a combination of composition control and induction hardening.

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